

wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen phosphorus or sulfur atom is linked to the phenolic ring as part of an ester, amido, ether, aminosulfonyl, sulfamoyl, carbonyl, acyl or sulfonyl group;

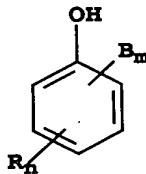
m is 0 to 4; and

wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;

n is 0 to 4; and

wherein m+n is 1 to 5.

2. (Once Amended) A color photothermographic element that is photographic film comprising at least three light-sensitive units which have their individual sensitivities in different wavelength regions, each of the units comprising at least one light-sensitive silver-halide emulsion, binder, and dye-providing coupler, and a blocked developer in the presence of a thermal solvent for promoting development in a dry or substantially dry process in the absence of thermal dye transfer, which thermal solvent has a melting point of at least 80°C, comprises a phenolic ring and is represented by the following structure



wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen, phosphorus or sulfur atom is linked to the phenolic ring as part

of a ketone, aldehyde, ester, amido, carbamate, ether, aminosulfonyl, sulfamoyl, sulfonyl, amine, phosphine, or aromatic heterocyclic group;

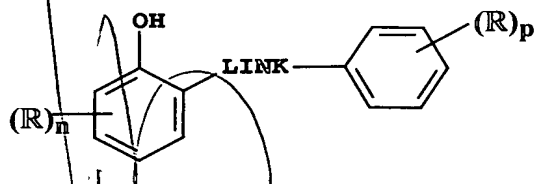
a<sup>1</sup>  
m is 0 to 4; and

wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;

n is 0 to 4; and

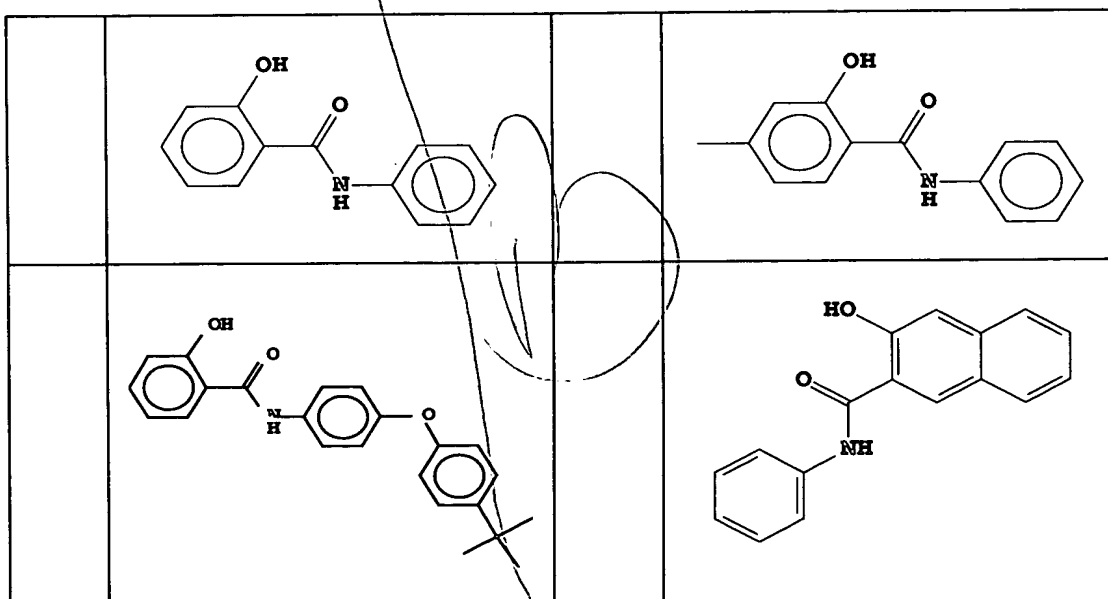
wherein m+n is 1 to 5.

a<sup>2</sup>  
8. (Once Amended) The color photothermographic element of claim 2 wherein the thermal solvent has the following structure:

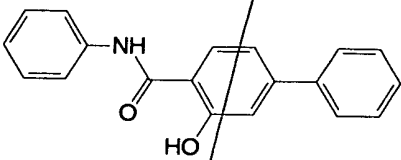
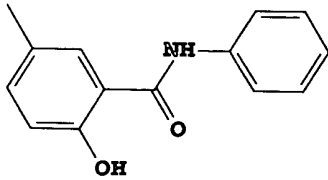
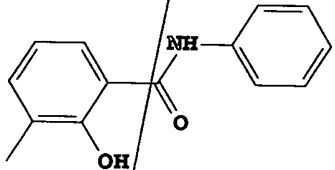
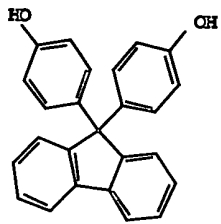
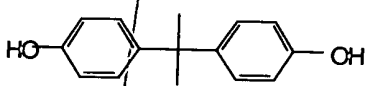
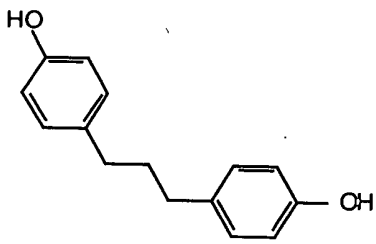
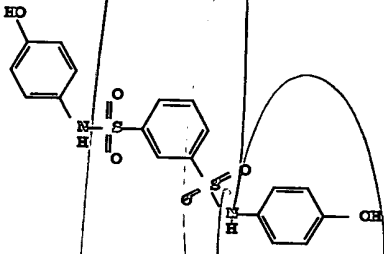


wherein LINK is selected from the group consisting of -C(=O)NH-, -NHC(=O)-, -NHSO<sub>2</sub>-, -C(=O)-, -C(=O)O-, -O(R<sup>3</sup>)-, -SO<sub>2</sub>NH-, and -SO<sub>2</sub>-; where R<sup>3</sup> is an alkyl group and R and n is as defined above; and p is 0 to 4.

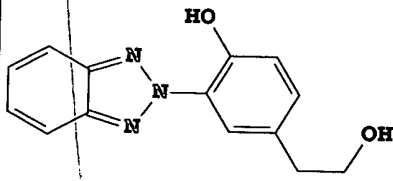
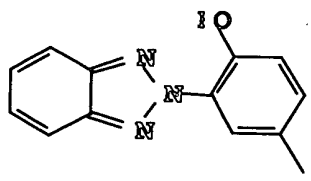
a<sup>3</sup>  
14. (Once Amended) The photothermographic element of claim 3 wherein the thermal solvent is selected from the group consisting of:

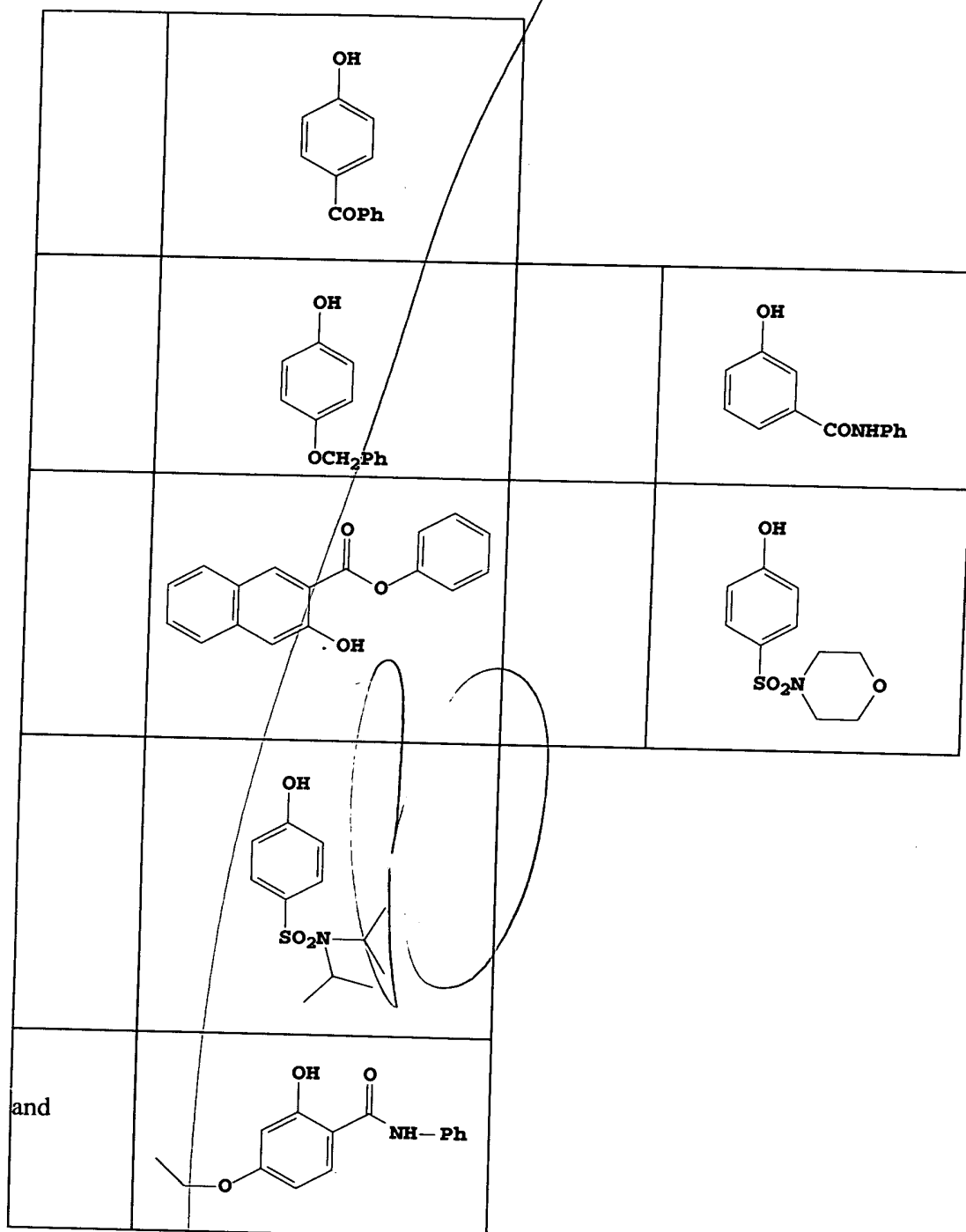


23

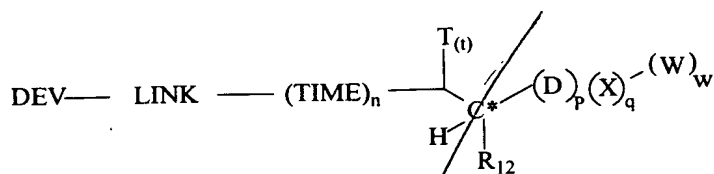
			
			
			
and			

15. (Once Amended) The photothermographic element of claim 2 wherein the thermal solvent is selected from the group consisting of:

			
--	---	--	---



16. (Once Amended) A color photothermographic element according to claim 1, wherein the blocked developer is a compound represented by the following structure:



wherein:

DEV is a developing agent;

LINK is a linking group;

TIME is a timing group;

n is 0, 1, or 2;

t is 0, 1, or 2, and when t is not 2, the necessary number of

hydrogens (2-t) are present in the structure;

C\* is tetrahedral (sp<sup>3</sup> hybridized) carbon;

p is 0 or 1;

q is 0 or 1;

w is 0 or 1;

p + q = 1 and when p is 1, q and w are both 0; when q is 1, then w

is 1;

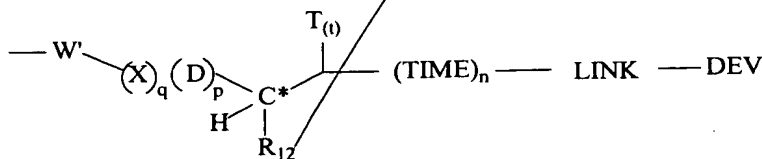
R<sub>12</sub> is hydrogen, or a substituted or unsubstituted alkyl, cycloalkyl, aryl or heterocyclic group or R<sub>12</sub> can combine with W to form a ring;

T is independently selected from a substituted or unsubstituted (referring to the following T groups) alkyl group, cycloalkyl group, aryl, or heterocyclic group, an inorganic monovalent electron withdrawing group, or an inorganic divalent electron withdrawing group capped with at least one C1 to C10 organic group that is either an R<sub>13</sub> or an R<sub>13</sub> and R<sub>14</sub> group; or T is joined with W or R<sub>12</sub> to form a ring; or two T groups can combine to form a ring;

D is a first activating group selected from substituted or unsubstituted (referring to the following D groups) heteroaromatic group or aryl group or monovalent electron withdrawing group, wherein said heteroaromatic group can optionally form a ring with T or R<sub>12</sub>;

X is a second activating group and is a divalent electron withdrawing group;

W is W' or a group represented by the following structure:



W' is independently selected from a substituted or unsubstituted (referring to the following W' groups) alkyl, cycloalkyl, aryl or heterocyclic group; and wherein W' in combination with T or R<sub>12</sub> can form a ring;

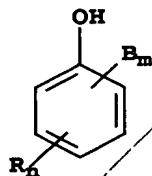
R<sub>13</sub>, R<sub>14</sub>, R<sub>15</sub>, and R<sub>16</sub> can independently be selected from substituted or unsubstituted alkyl, aryl, or heterocyclic group;

any two members of the following set: R<sub>12</sub>, T, and either D or W, that are not directly linked may be joined to form a ring, provided that creation of the ring will not interfere with the functioning of a blocking group in the blocked developer;

wherein the T, R<sub>12</sub>, D, X and W groups are selected such that the blocked developer has a half-life (t<sub>1/2</sub>) ≤ 20 min, and a peak discrimination, at a temperature of at least 60°C, of at least 2.0.

17. (Once Amended) The photothermographic element of claim 1 wherein peak discrimination is 3 to 10 and peak discrimination is at a temperature of 100 to 160°C.

29. (Once Amended) A method of image formation comprising the step of developing an imagewise exposed photothermographic element that is a photographic film comprising at least three light-sensitive units which have their individual sensitivities in different wavelength regions, each of the units comprising at least one light-sensitive silver-halide emulsion, binder, and dye-providing coupler, and a blocked developer having a half-life (t<sub>1/2</sub>) ≤ 20 min, and a peak discrimination, at a temperature of at least 60°C, of at least 2.0, which blocked developer and coupler is developed in the presence of a thermal solvent for promoting development in a dry or substantially dry process in the absence of thermal dye transfer, which thermal solvent comprises a phenolic ring and has the following formula:



(I)

wherein the substituent B is independently selected from a substituent where an oxygen, carbon, nitrogen phosphorus or sulfur atom is linked to the ring as part of a ketone, aldehyde, ester, amido, carbamate, ether, aminosulfonyl, sulfamoyl, sulfonyl, amine, phosphine, or aromatic heterocyclic group;

m is 0 to 4; and

wherein the substituent R is independently selected from a substituted or unsubstituted alkyl, cycloalkyl, aryl, alkylaryl, or forms a ring with another substituent on the ring;

n is 0 to 4; and

wherein m+n is 1 to 5.

30. (Once Amended) The method of claim 29 wherein the substituent B is linked to the phenolic ring as part of an ester, amido, ether, aminosulfonyl, sulfamoyl, sulfonyl or sulfone group;

31. (Once Amended) The method of claim 29 wherein peak discrimination is 3 or greater and peak discrimination is at a temperature of 100 to 160°C.

40. (Once Amended) A method according to claim 39, wherein printing the electronic image representation is accomplished with one of the following: electrophotography; inkjet; thermal dye sublimation; or CRT or LED printing to sensitized photographic paper.